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(54) **Intelligent scan image sensor.**

(57) An intelligent scan image sensor comprising:
a two-dimensional solid-state array of addressable imaging cells arranged for exposure to an image, each cell comprising a photosensitive diode and a sample and hold unit, the diode accumulating an electrical quantity having a value in relation to the image light intensity falling thereupon during successive integration periods, the sample and hold unit being operable to repeatedly sample and store the accumulated quantities as analog video data values at the end of each of the successive integration periods;

row and column selector switches each respectively associated with one of the two array dimensions; and

a video output amplifier operative with the selector switches for providing the video data values in random access fashion during a readout operation,

the video data values being selectably gated onto a single output bus of the cell array by the row and column selector switches, the single output bus feeding the video output amplifier wherein the video

data values are accessible in the readout operation independent of the repeated sampling operation.

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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-4 471 228 (NISHIZAWA et al.) * Column 1, lines 42-68; column 5, lines 17-40; figures 1-6 *	1-4,9-12, 16,18-19	H 04 N 3/15
P,A	GB-A-2 197 718 (MESSERSCHMITT-BÖLKOW-BLOHM) * Page 2, line 14 - page 4, line 19; figures 1-2 *	1-4,9-11	
A	US-A-4 554 585 (CARLSON) * Figure 2a *	5-6	
A	DE-A-3 309 949 (AGFA-GEVAERT) * Abstract; figure 1 *	7-8	
A	FR-A-2 476 949 (THOMSON-CSF) * Claims 1-2; figure 2B *	15,17,20	
A,D	IEEE TRANSACTIONS ON ELECTRON DEVICES, vol. ED-23, no. 2, February 1976, pages 189-195, New York, US; H.K. BURKE et al.: "Charge-injection imaging: operating techniques and performances characteristics" * Page 192, lines 14-37 *	1-4,9-12, 18-19	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 04 N
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of search 05 June 91	Examiner SCHINNERL A.
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document			